What is claimed is:

1. A blank for an optical member of quartz glass which includes a contour of said optical member with an overdimension and the surface of which is defined by a lower side, an upper side opposite said lower side and spaced apart therefrom and by an outer edge extending around a center axis, characterized in that there is provided a surrounding thickened portion (32) which begins in the area of said outer edge (39) and extends towards said center axis (35), and in which the distance between lower side (38) and upper side (37) is greater than in the area of said center axis (35).

2. The blank according to claim 1, characterized in that said distance between lower side (38) and upper side (37) across said thickened portion (42) decreases continuously when viewed from said outer edge (39) towards said center axis (35).

3. The blank according to claim 2, characterized in that said distance decreases faster than linearly.

4. The blank according to claim 2, characterized in that said distance decreases linearly.

5. The blank according to any one of the preceding claims, characterized in that said thickened portion (42) begins at said outer edge (39).

6. The blank according to any one of the preceding claims, characterized in that said thickened portion (42) extends from said center axis (35) to said outer edge (39).

7. The blank according to any one of the preceding claims, characterized in that said lower side (38) and said upper side (37) are provided with a thickened portion (42).

8. A vessel for heat-treating a cylindrical blank for an optical member of synthetic quartz glass, which includes the contour of said optical member with an overdimension and comprises an interior for receiving said blank and SiO_2 powder for filling intermediate spaces, said interior having a removable upper side and a lower side opposite said upper side and spaced apart therefrom, and an outer edge connecting upper side and lower side and extending around a center axis, characterized in that said upper side and said lower side in the area of said center axis have a higher thermal conduction than in the area of said outer edge.

9. The vessel according to claim 8, characterized in that lower side and upper side in the area of said outer edge have a larger wall thickness than in the area of said center axis.

10. The vessel according to claim 9, characterized in that upper side and lower side are each equipped with a surrounding thickened portion which begins in the area of said outer edge and extends towards said center axis and in which the wall thickness is greater than in the area of said center axis.

11. The vessel according to claim 10, characterized in that the wall thickness of lower side and upper side decreases continuously across said thickened portion when viewed from said outer edge towards said center axis.

12. The vessel according to claim 11, characterized in that said wall thickness decreases faster than linearly.

13. The vessel according to claim 11, characterized in that said wall thickness decreases linearly.

14. The vessel according to claim 10, characterized in that the wall thickness of lower side and upper side decreases in steps across said thickened portion when viewed from said outer edge towards said center axis.

15. The vessel according to claim 9, characterized in that the wall thickness of upper side and lower side is reduced by recesses whose number, depth or width is each time larger in the area of said center axis than in the area of said outer edge, with the proviso that said upper side and said lower side have a higher thermal conduction in the area of said center axis than in the area of said outer edge.

16. The vessel according to any one of the preceding claims 8 to 15, characterized in that said interior is defined by walls of quartz glass.

17. The vessel according to claim 16, characterized in that said upper side and said lower side are made from quartz glass of a higher thermal conductivity, and said outer edge from quartz glass of a lower thermal conductivity.

18. The vessel according to any one of the preceding claims 8 to 17, characterized in that said SiO_2 powder is a synthetically produced SiO_2 powder having a sodium content of less than 30 wt. ppb.

19. The vessel according to any one of the preceding claims 8 to 18, characterized in that said SiO_2 powder is a synthetically produced SiO_2 powder having a hydrogen content of at least 1.0×10^{19} molecules/cm^2.

20. The vessel according to any one of the preceding claims 8 to 19, characterized in that the outer diameter of said upper side is smaller than the inner diameter of said outer edge.

21. A method for producing a blank for an optical member of quartz glass, comprising a step of providing said blank which includes the contour of the optical member to be produced with an overdimension and has a surface which is defined by a lower side, an upper side opposite said lower side and spaced apart therefrom and by an outer edge extending around a center axis, and of subjecting said blank to a thermal treatment and subsequently cooling the same, characterized in that measures are provided which during cooling keep the heat conduction in the area of said outer edge lower than in the area around said center axis.

22. The method according to claim 21, characterized in that the measures consist in using a preform according to any one of claims 1 to 7 as said blank.

23. The method according to claim 21, characterized in that the measures consist in introducing said blank into a vessel according to any one of claims 8 to 20, in filling intermediate spaces between said blank and said vessel with SiO_2 powder and in subjecting said blank surrounded by said SiO_2 powder in said vessel to a thermal treatment by introducing said vessel into a furnace and by heating and subsequently cooling the same.

24. A blank for an optical member of quartz glass, said blank comprising:

a contour portion with a contour of said optical member, and

an overdimension portion surrounding said contour portion, said overdimension portion having a surface including a lower side, an upper side

opposite said lower side and spaced at a varying distance therefrom, and an outwardly disposed outer surface extending about a center axis of the blank,

said overdimension portion including a thickened portion which extends from said outer surface towards said center axis, said thickened portion varying in thickness so that the distance between the lower side and the upper side in an area adjacent the outer surface is greater than the distance between the lower side and the upper side in an area of said center axis.

25. The blank according to claim 24, wherein the distance between lower side and upper side across said thickened portion decreases continuously inwardly towards said center axis.

26. The blank according to claim 25, wherein said distance decreases faster than linearly relative to inward position on the blank.

27. The blank according to claim 25, wherein said distance decreases linearly relative to inward position on the blank.

28. The blank according to claim 24, wherein said thickened portion begins at said outer surface.

29. The blank according to claim 25, wherein said thickened portion begins at said outer surface.

30. The blank according to claim 24, wherein said thickened portion extends from said center axis to said outer surface.

31. The blank according to claim 25, wherein said thickened portion extends from said center axis to said outer surface.

32. The blank according to claim 24, wherein said thickened portion is adjacent the upper side and a second thickened portion is provided adjacent the lower side, both of the thickened portions being thicker outwardly of the blank than in the area of the center axis thereof.

33. A vessel for heat-treating a cylindrical blank for an optical member of synthetic quartz glass, said blank including a contour portion with a contour of said optical member, and

an overdimension portion surrounding said contour portion, said vessel comprising a removable upper side and a lower side opposite said upper side and spaced apart therefrom, and an outer edge connecting upper side and lower side and extending around a center axis, said upper side, said lower side and said outer edge defining an interior of the vessel receiving therein said blank and SiO_2 powder for filling intermediate spaces surrounding the blank in said interior, said upper side and said lower side have a higher thermal conduction in an area of said center axis than in an area adjacent said outer edge.

34. The vessel according to claim 33, wherein the lower side and the upper side have a greater wall thickness in the area adjacent said outer edge than in the area of said center axis.

35. The vessel according to claim 34, wherein the upper side and the lower side each have a surrounding thickened portion which begins in the area of said outer edge and extends towards said center axis, said thickened portions having a wall thickness greater adjacent the outer edge than in the area of said center axis.

36. The vessel according to claim 35, wherein the wall thickness of the lower side and the upper side decreases continuously across said thickened portion inwardly from said outer edge towards said center axis.

37. The vessel according to claim 36, wherein said wall thickness decreases faster than linearly relative to inward position in the vessel.

38. The vessel according to claim 36, wherein said wall thickness decreases linearly relative to inward position in the vessel.

39. The vessel according to claim 35, wherein the wall thickness of lower side and upper side decreases in steps across said thickened portion from said outer edge towards said center axis.

40. The vessel according to claim 34, wherein the wall thickness of upper side and lower side is reduced by recesses therein that are greater in number, depth or width in the area of said center axis than in the area of said outer edge, such that said upper side and said lower side have a higher thermal conduction in the area of said center axis than in the area of said outer edge.

41. The vessel according to claim 33, wherein said interior is defined by walls of quartz glass.

42. The vessel according to claim 41, wherein said upper side and said lower side are made from quartz glass of a higher thermal conductivity, and said outer edge from quartz glass of a lower thermal conductivity.

43. The vessel according to claim 33, wherein said SiO_2 powder is a synthetically produced SiO_2 powder having a sodium content of less than 30 wt. ppb.

44. The vessel according to claim 33, wherein said SiO_2 powder is a synthetically produced SiO_2 powder having a hydrogen content of at least 1.0×10^{19} molecules/cm^2.

45. The vessel according to claim 33, wherein said upper side has an outer diameter and the outer edge has an inner diameter, the outer diameter of said upper side being smaller than the inner diameter of said outer edge.

46. A method for producing a blank for an optical member of quartz glass, said method comprising:

providing said blank which includes a contour portion for the contour of the optical member to be produced and an overdimension portion that has a surface which is defined by a lower side, an upper side opposite said lower side and spaced apart therefrom, and an outer edge extending around a center axis, and

subjecting said blank to a thermal treatment; and

subsequently cooling the blank, wherein measures are provided which, during cooling, keep heat conduction in adjacent said outer edge lower than in an area around said center axis.

47. The method according to claim 46, wherein the measures comprise use of a preform as said blank wherein said overdimension portion includes a thickened portion which extends from said outer edge towards said center axis, said thickened portion varying in thickness so that the distance between the lower side and the upper side in an area adjacent the outer edge is greater than the distance between the lower side and the upper side in an area of said center axis.

48. The method according to claim 46, wherein the measures comprise

introducing said blank into a vessel having a removable upper side and a lower side opposite said upper side and spaced apart therefrom, and an outer edge connecting upper side and lower side and extending around a center axis, said upper side, said lower side and said outer edge defining an interior of the vessel receiving therein said blank, said upper side and said lower side have a higher thermal conduction in an area of said center axis than in an area adjacent said outer edge,

filling intermediate spaces between said blank and said vessel with SiO_2 powder, and

subjecting said blank surrounded by said SiO_2 powder in said vessel to a thermal treatment by introducing said vessel into a furnace and heating and subsequently cooling the vessel.